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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,440	01/27/2004	Daniel Clark	118478	8682
25944	7590 11/24/2004		EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928			HEINRICH, SAMUEL M	
ALEXANDRIA, VA 22320			ART UNIT	PAPER NUMBER
			1725	
			DATE MAILED: 11/24/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Ampliantian No	A 154/				
	Application No. Applicant(s)					
Office Astic	10/764,440	CLARK, DANIEL				
Office Action Summary	Examiner	Art Unit				
	Samuel M Heinrich	1725				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address/				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	16(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U S C S 133)				
Status						
1) Responsive to communication(s) filed on 30 Se	<u>ptember 2004</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowan	ce except for formal matters, pro	secution as to the merits is				
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	33 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-10</u> is/are pending in the application.						
4a) Of the above claim(s) <u>7-10</u> is/are withdrawn	from consideration					
5) Claim(s) is/are allowed.						
6) Claim(s) 1,2,4 and 5 is/are rejected.						
7)⊠ Claim(s) <u>3 and 6</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner						
10) The drawing(s) filed on 27 January 2004 is/are:		to by the Examiner				
Applicant may not request that any objection to the d						
Replacement drawing sheet(s) including the correction		, , ,				
11)☐ The oath or declaration is objected to by the Exa						
Priority under 35 U.S.C. § 119		·				
12)⊠ Acknowledgment is made of a claim for foreign p	oriority under 35 U.S.C. & 119(a).	-(d) or (f)				
a)⊠ All b)□ Some * c)□ None of:	5115(a)	-(d) 61 (1).				
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<ol><li>Copies of the certified copies of the priori</li></ol>						
application from the International Bureau	(PCT Rule 17.2(a)).	-				
* See the attached detailed Office action for a list of	of the certified copies not received	d.				
		•				
Attachment(s)						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)	PTO-413)				
Paper No(s)/Mail Date 10212004.	5) Notice of Informal Pa					
. Patent and Trademark Office						

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### **DETAILED ACTION**

### Election/Restrictions

Applicant's election with traverse of Group I, method claims 1- 6, in the reply filed on September 30, 2004 is acknowledged. The traversal is on the ground(s) that "the subject matter of all claims is sufficiently related". This is not found persuasive because the instant claimed apparatus structure can be used for laser joining or welding and the search therefor is not coextensive with the search for the methods of laser deposition.

The requirement is still deemed proper and is therefore made FINAL.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 rejected under 35 U.S.C. 102(b) as being clearly anticipated by JA-02092479. See the English language Abstract and the Figures.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over JA-02092479 as applied to claim 1 above, and further in view of JA-02092480. JA-

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02092479 shows and describes reconfiguring the cross-section of filler metal, but does not describe the instant claimed shapes. JA-02092480 describes forming grooves or serrations on the filler metal. The use of serrations on the filler metal described in JA-02092479 would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the grooves provide improved melting performance similar to the reshaping done in the JA-02092479 disclosure.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over JA-02092479 as applied to claim 1 above, and further in view of Blanpain et al. JA-02092479 show a heater 9, but do not describe it as an induction heater. Blanpain et al disclose the well known induction heater. The use of an induction heater in the JA-02092479 method would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the induction heater provides contactless heating of the filler filament as it is displaced toward the deposition location.

## Allowable Subject Matter

Claims 3 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited art pertains to wire shapes and deposition welding.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M Heinrich whose telephone number is 703 308 1168. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G Dunn can be reached on 703 308 3318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Samuel M Heinrich Primary Examiner Art Unit 1725